Center Innovation Fund: AFRC CIF

New Flight Data Acquisition Techniques for Store Separation

Completed Technology Project (2016 - 2017)

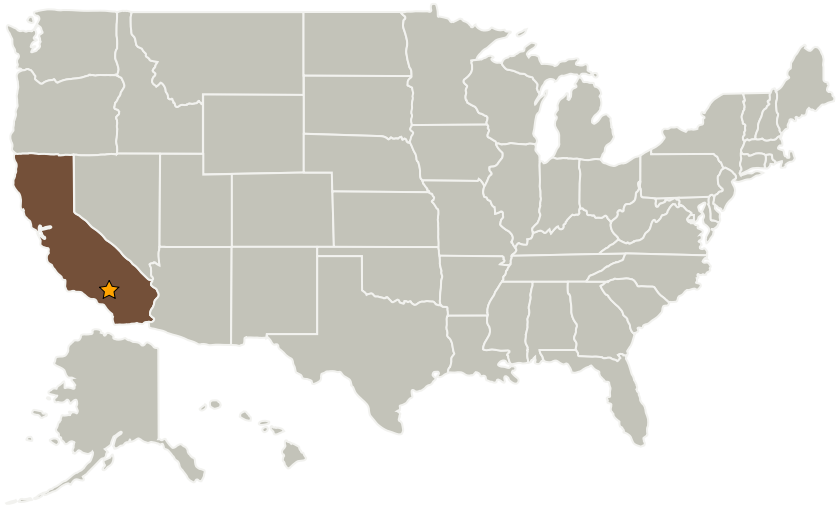
Project Introduction

We wish to evaluate the potentials of 3D flash LIDAR camera and DGPS technologies for the application of store separation/docking flight data acquisition.

Anticipated Benefits

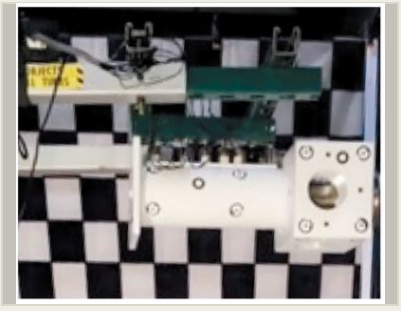
Develop a data analysis technology using 3D Lidar Cameras in store separation for air launch systems

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
★Armstrong Flight Research Center(AFRC)	Lead Organization	NASA Center	Edwards, California

Primary U.S. Work Locations
California



Ground test rig for store separation data acquisition system testing

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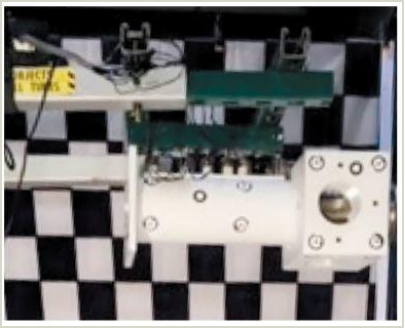
Images



Project Image
Ground test rig for store separation data acquisition system testing *(https://techport.nasa.gov/image/35785)*

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Armstrong Flight Research Center (AFRC)

Responsible Program:

Center Innovation Fund: AFRC CIF

Project Management

Program Director:

Michael R Lapointe

Program Manager:

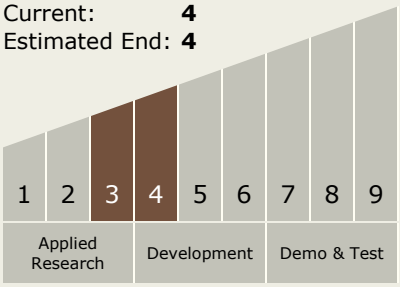
David F Voracek

Principal Investigator:

Trong T Bui

Technology Maturity (TRL)

Start: **3**
Current: **4**
Estimated End: **4**



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Technology Areas

Primary:

- TX16 Air Traffic Management and Range Tracking Systems
  - TX16.2 Weather/Environment

Target Destination

Earth